Aparna Gudivada

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Github | LinkedIn | Website

Education

University of Utah,Salt Lake City,UT Aug 2023 - Apr 2025
Masters in Computer Science ***CGPA: 3.72/4***
Relevant Coursework: Advance Data Structures and Algorithms, Operating Systems, Computer Architecture, Machine Learning,Visualization for Scientific Data

VR Siddhartha Engineering College,Vijayawada,India Jul 2017 - Jul 2021
Bachelors in Information Technology ***CGPA: 3.6/4***
Relevant Coursework: Object Oriented Programming, Data Mining, Data Structures, Computer Networks, Operating Systems, Computer Architecture, Databases

Skills

Languages: Python, Java, C#, C++, C, HTML, CSS, Bootstrap,JavaScript, PHP, Typescript, R Programming, Kotlin

Technologies & Tools: Angular, ReactJS, Node.js, Figma, Django, PostgreSQL, MySQL,NOSQL, NextJS, MongoDB, .NET, Spring, Blockchain, Machine Learning, NLP, LLM, LangChain, NumPy, Pandas, scikit-learn, Mobile App Development, AWS, Azure, Maven, Visual Studio Code, Jupyter Notebook, Git, Android Studio, Flask, GitHub, Jira, Bit Bucket, NetBeans, IntelliJ IDE, Eclipse, Docker, Jenkins

Work Experience

University of Utah, Salt Lake City Aug 2024 - Present
Graduate Teaching Assistant (App System Design, Data Structures, Software Engineer)

- Conducted 6+ weekly help hours for 30+ students, mentoring on Kotlin-based app development,advanced data structures and software engineering principles troubleshooting coding issues, and enhancing their project outcomes.
- Evaluated 50+ assignments and projects, performing comprehensive code reviews and delivering constructive feedback to ensure adherence to industry standards.

Intermountain Health, Salt Lake City May 2024 - Dec 2024
Software Engineer Intern

- Collaborated with cross-functional teams in an Agile environment, resulting in a 20% increase in development efficiency,and ensuring the timely delivery of high-quality software.
- Developed and maintained backend services with Node.js and Express for the Preadmission Testing (PAT) application, enhancing patient status visibility and tracking for over 100 nurses and improving operational efficiency.
- Implemented CRUD operations and data validations with PostgreSQL and Sequelize ORM, optimizing database performance by 30% and ensuring secure data management with transactions and integrity checks.
- Designed a responsive user interface in React with React Hooks and Redux for state management, reducing manual task completion time by 40% and significantly improving the user experience for healthcare professionals.
- Integrated RESTful API for seamless communication between the frontend and backend, enabling real-time data synchronization and significantly improving the responsiveness of the application by 30%.
- Created and executed comprehensive unit tests using Jest achieving over 90% code coverage for critical components, which enhanced code reliability.

Accenture, Hyderabad, India Aug 2021 - Jul 2023
Software Development Engineer

- Led the migration from AngularJS to Angular 13, successfully resolving data binding issues and maintaining high code quality. Addressed 95% of accessibility issues, significantly enhancing web interface inclusivity and usability.
- Proficiently built interactive user interfaces using HTML, CSS, and the Angular framework, leading to a 20% improvement in user engagement and product usability.
- Achieved 90% code coverage by implementing unit and end-to-end testing with Jasmine,ensuring delivery of high-quality, reliable code.
- Actively contributed to streamlining processes across all phases of the Software Development Life Cycle (SDLC), including requirements gathering, design, development, testing, deployment, and maintenance.
- Utilized NgRx for state management and utilized RxJS for asynchronous programming, enhancing application performance and scalability which led to a 25% improvement in responsiveness.
- Integrated CI/CD pipelines using Azure DevOps, automating build, test, and deployment processes, which reduced deployment times by 40% leading to more reliable software releases.
- Provided support for post-production activities, including troubleshooting and resolving issues in live applications, achieving a 98% resolution rate within 24 hours and ensuring optimal performance.

APSAC, Vijayawada, India May 2021 - Jul 2021
Research Intern

- Collaboration with a multidisciplinary team of 5 to automate the precise estimation of vegetation areas within specified regions, significantly improving efficiency and accuracy.
- Reduced processing time by 30% through the development of an optimized workflow for downloading Sentinel-2 satellite data via Sentinel Hub and Sentinel Sat APIs.
- Improved data quality and vegetation cover quantification by applying data preprocessing techniques using Python libraries and specialized vegetation indices like NDVI, achieving a 25% increase in accuracy.
- Developed visualizations and reports to communicate findings effectively to stakeholders, resulting in a 40% increase in engagement enhancing decision-making processes related to environmental monitoring.

Project Work

Comparison of Feature Reduction Techniques in Remote Sensing Images [Publication]

- Led a project utilizing machine learning algorithms for real-time change detection in remote sensing images, achieving a 20% improvement in accuracy through Factor Analysis, Principal Component Analysis, and K-means clustering for dimensionality reduction.

TrackMyJobs

- Deployed a full-stack web application using the MERN stack (MongoDB, Express.js, React, Node.js) that supports over 1,000 active users in efficiently managing job applications.
- Introduced real-time updates and secure backend services, reducing application management time by 40%, and created visualizations to improve data insights.

MediBot

- Built an AI chatbot using Retrieval-Augmented Generation (RAG) and FAISS vector database to analyze a dataset of over 1,000 drug side effects, accurately identifying whether reported symptoms are common for specific medications.
- Designed and deployed an intuitive Streamlit UI, enhancing user engagement and delivering insights into symptom-drug correlations.

Awards and Certificates

- **Microsoft Learn Student Ambassador:** Conducted events to engage students with industry advancements, shared knowledge across various technical areas, and facilitated peer learning.
- **Internshala Student Partner:** Organized workshops and informational sessions to connect students with internship opportunities on Internshala, enhancing their career readiness and technical skills.
- Python3 Programming Specialization by University of Michigan from Coursera
- Machine Learning Specialization by University of Washington from Coursera.
- Block Chain and Smart Contracts by University of Suny Buffalo from Coursera.
- **Hackerrank Profile:** https://www.hackerrank.com/profile/AparnaGudivada
- **Leetcode Profile:** https://leetcode.com/u/AparnaGudivada/